







TRADE

Bonn's imports increase by more than their fair share

The Federal Republic of Germany did its share in boosting the world's economy last year. This must be pointed out to those who demand that we embark on a more expansionist course.

Countries with less buoyant economies have been demanding that the economically strong states step on the gas and tolerate somewhat higher inflation rates in order to help the weaker ones overcome their difficulties.

Such appeals are out of place in Bonn because West Germany has done more to stimulate the economies of its trading partners than other countries in a similar position.

The United States, Japan and the Federal Republic are generally termed the locomotives of world economy. But what is the actual state of those growth locomotives?

In the period from 1974 to 1976 there was no increase whatsoever in Japan's imports. At the same time the United States boosted its imports by 14 per cent and the Federal Republic by a whopping 26 per cent.

In other words, foreign goods and services flowed into this country at a considerable pace.

Taking a closer look at last year's imports, we will see that the 20.3-per-cent increase over the previous year (bringing total imports to DM222,000 million) is not due to increased purchases of raw materials nor is it attributable to higher prices, which accounted for a mere three per cent.

Oil imports play a relatively modest role in the overall picture. Mining products which, for statistical purposes, include oil purchased abroad show an increase of 19 per cent.

Well above average, on the other hand, was the increase in the import of capital goods which amounted to 23 per cent, representing 22 per cent of total imports. The lion's share in this sector went to mechanical engineering, imports of which increased by 17.2 per cent, electronics, which increased by as much as 21.1 per cent, and motor vehicles, with 29 per cent.

Thus our foreign competitors got their fair share of this country's automobile bonanza in 1976. And since most of these suppliers are domiciled in France, Italy and Britain, two of the particularly weak nations received a beneficial shot in the arm.

But even in the consumer goods sector, which accounted for 15 per cent of our imports, our foreign competitors had no reason to complain about a lack of opportunity in this country's market. The increase in this sector amounted to just under 18 per cent, with plastics reaching 22.4 per cent. Textile imports, too, increased by close to 17 per cent.

Orders down

Our industry's incoming orders diminished conspicuously at the beginning of this year.

According to the Bonn Ministry of Economic Affairs, orders for the processing industry dropped by six per cent from December 1976 to January 1977. And orders from abroad dropped by ten per cent during the same period.

The decrease was particularly noticeable in the capital goods sector, where it amounted to 14.5 per cent.

The Ministry pointed out, however, that the new preliminary figures released by the Federal Statistics Office in Wiesbaden are possibly misleading due to the switch from industrial statistics only to "statistics" covering all manufacturing trades.

(Hannoversche Allgemeine, 22 March 1977)

Caution advised at Western economic summit

Bonn hopes that the London summit will confirm the OECD agreements in which the parties concerned undertook not to introduce protectionist administrative measures.

Particular circumspection, Herr Rohwedder said, is called for where relations between Bonn, Tokyo and Washington are concerned. Bonn feels that some partners have latterly been gunning for each other. The steel industry in particular, Detlev Rohwedder pointed out, has embarked on a course contrary to the ideas of the Ministry of Economic Affairs under the cloak of the Montanvertrag (the European Coal and Steel Community).

Rohwedder expressed concern about the fact that Belgium's BEC Commissioner Etienne Davignon, yielding to pressure by his country's steel industry, has embarked on a conspicuously protectionist course. Says Herr Rohwedder: "Where our relations with Japan are concerned we must desist from thinking in terms of dumping all the time."

and the sub-section clothing by 16 per cent.

All in all, the increase in our 1976 imports was about three times as high as the growth of our GNP and this can only be termed remarkable. Foreign suppliers benefited last year from the fact that the deutschmark was rising on foreign exchange markets. Moreover, the sustained, though slow, recovery of our economy engendered heavier demand for foreign products.

In analysing last year's imports according to countries of origin we will see that our European trading partners did rather well. Imports from the EEC increased by 17.2 per cent. The French share remained more or less average while imports from Britain rose by a startling 23 per cent. Italy was clearly below average, having achieved only 9.7 per cent.

Considerably more spectacular results were achieved by some other European countries. Imports from Switzerland, for instance, rose by 24 per cent and those from Austria by 29. But the developing countries, too, got their share. They supplied goods to the tune of more than DM45,000 million — an increase of 17 per cent over the previous year.

But import increases from the communist states topped all other countries. They rose by 26.8 per cent to DM10,980 million, achieving a five-per-cent share of overall imports (compared with 4.7 per cent in the previous year). All communist countries except North Korea benefited from this increase of DM2,300 million.

Particularly conspicuous was the rise in imports from the Soviet Union which amounted to DM1,120 million. Imports from Poland rose by DM483 million, Hungary DM227 million, Rumania DM203 million, People's Republic of China DM128 million and Czechoslovakia DM111 million.

Those who still demand that we do more for the world economy must be told that, if the cooperativeness of a country is to be measured by its willingness and ability to import, the Federal Republic of Germany has certainly piled its weight.

(Süddeutsche Zeitung, 19 March 1977)



Trade surplus modest, says Bundesbank

Kölnischer Stadt-Anzeiger

The Bundesbank has cautioned against optimism concerning the Federal Republic's trade surpluses. In its latest monthly report, the Bundesbank drew attention to the fact that, more than other countries, West Germany must have trade surpluses in order to offset its deficits in the service industry and the extremely high transfers abroad.

According to Bundesbank figures, the country achieved a trade surplus of DM41,200 million in 1976. But DM33,700 million had to be used to offset trade deficits in the service industry and in transfers.

The services particularly affected include the travel and holiday business, commissions, trade fairs and advertising costs. Transfers involve primarily West workers' money transfers to their home countries, payments of pensions or other social benefits to foreigners, contributions to international organizations and non-repayable development aid.

According to the Bundesbank report, the deficit in the transfer balance amounted to DM17,700 million in 1976. Of this amount, DM4,400 million was transfers of pensions and social benefits to foreigners. Foreign workers transferred to their home countries DM4 million and DM3,700 million was paid to EEC funds.

The Bundesbank criticized the fact that the International Monetary Fund does not include government transfers abroad (DM9,400 million in 1976) in its trade balance. The Bundesbank would like to see this included in the trade balance and that this country's surplus is therefore seemingly very large.

According to the Bundesbank, the actual surplus in 1976 amounted to DM7,500 million. This is a mere 0.3 per cent of GNP, which means that the Federal Republic is rather close to having a trade balance. The Bundesbank would like to say that, taking into account the deficits in the service industry's foreign trade and foreign transfers, this country remains the largest net importer of goods.

Moreover, with its disappointing increase in imports, which amounted to 21 per cent, rising to DM21,200 million, the Federal Republic is not only an additional market and a booster of the economies of its trading partners.

(Kölnischer Stadt-Anzeiger, 19 March 1977)

MARKETS

More and more German firms take the US plunge

America has been rediscovered — 500 years after Columbus crossed the Atlantic. The massive buying power of the States has made that country an interesting proposition for West German investors.

Volkswagen is erecting an assembly plant for its "Rabbit" in Pennsylvania, Daimler-Benz is considering the acquisition of certain plants of White Motors, which is in financial straits at present, and Linde has recently bought a stake in the forklift truck business of the Otis Elevator Company in New York.

But the big capital trek to America is spearheaded by the chemical industry. This country's major chemical concerns have for some time been manufacturing in the country of unlimited opportunities. And smaller, though equally fine, chemical companies are following suit. The most recent of them is Degussa, which intends to invest some 150 million dollars in Alabama by 1978.

According to the Bonn Ministry of Economic Affairs, this country's investments in America stood at DM5,400 million at the end of 1976. But this figure only includes capital transfers across our borders and not transfers made from Luxembourg and other financial centres. Appreciation and re-invested profits are also not included in this figure. If one were to include all this, the actual value of West German investments in the United States would amount to DM7,000 million.

Transfer figures are nevertheless indicative of the growing interest of this country's business in the acquisition and establishment of companies in the United States.

While, in the early seventies, West German investments in America rose by about DM300 million annually, this figure reached the DM1,200 million mark by 1976.

This is clearly an investment record. Meanwhile Germans are currently investing more in America than vice versa (American investments in the Federal Republic amounted to DM800 million in 1976).

But the sum total of US investments in this country, again using capital transfers as a yardstick, still by far surpasses German investments in the United States, amounting to DM18,000 million.

Granted, it is no accident that the increase of German investments in America coincides with a radical change in foreign exchange parities. The days are over when Americans could buy German factories out of their petty cash box, so to speak, and transactions in the opposite direction were prohibitively expensive. A dollar no longer costs four deutschmarks but a mere DM2.50.

The revaluation of the deutschmark has made investments in the United States cheaper and — even more important perhaps — it has more or less equalised production costs.

While actual hourly wages are still higher in the United States, additional costs caused by social security contributions and the like are considerably lower. Moreover, energy and raw materials are available at a reasonable cost. And freight charges are diminishing the more production rests on American component parts. All this makes it quite profitable to supply the American market from a factory located in that country.

The question of costs, while important, is not the main motivating force behind German investments in the United States. The main reason is the physical presence on the world's largest market and proximity to the customer. This makes it possible to react more flexibly to demand, be it for goods or services, and to guarantee shipments (an aspect of paramount importance in the chemical industry) while at the same time capturing a larger share of the market without bogging down in the jungle of tariff regulations.

White more than 11 per cent of West Germany's direct investments in the post-war era went to the United States, in certain individual branches of industry this proportion is even higher. The chemical giant Bayer, for instance, concentrated 40 per cent of its foreign investments in the United States. Bayer's sales in America amount to approximately 800 million dollars per annum of which 85 per cent is accounted for by the concern's American output.

The American market is not only important for our chemical industry because it is demanding and because only top-notch products stand a chance, but also because the Americans are extremely domestically orientated where chemicals are concerned, of which they buy only five per cent abroad.

In other words, one must be on the spot if one is to make a sale. This consideration was also the motivating power behind Degussa's decision to erect a factory in Alabama. The cyanurechloride which Degussa will manufacture in its US plant will be sold primarily to Shell, which intends to process it as a weedkiller in its Alabama factory. There is every likelihood that Shell would have found shipments of that chemical from Germany too unreliable.

Furthermore, freight costs of light but bulky chemicals to the United States would have been disproportionately high. This is a consideration which carries less weight for the automobile industry. But even so, freight costs played a considerable role in VW's feasibility study for its American plant.

Still, with 40 per cent of the component parts for the "Rabbit" having to come from the Federal Republic, Volkswagen will be unable to rid itself of freight charges entirely.

But this alone is unlikely to induce VW to use American components for its "Rabbit."

True, VW's chief executive pointed out that mass produced components could be bought more cheaply in the United States, but before this can be done American manufacturers must meet VW standards.

In keeping with the general trend, VW's headquarters in Wolfsburg stress the importance of an operational base close to the customer because it eliminates the "pipeline effect." This is the tedious time-lag between the exploration of new customers' wishes and their implementation at the German assembly line. Including transportation, it can take

the German-American Chamber of Commerce in New York recently drew attention to the fact that it is more than ten years since a European airliner was sold to the United States.

Is trade between the United States and Europe strictly one-way where highly sophisticated technical products are concerned? This certainly seems to apply with regard to aircrafts and complex weapons systems.

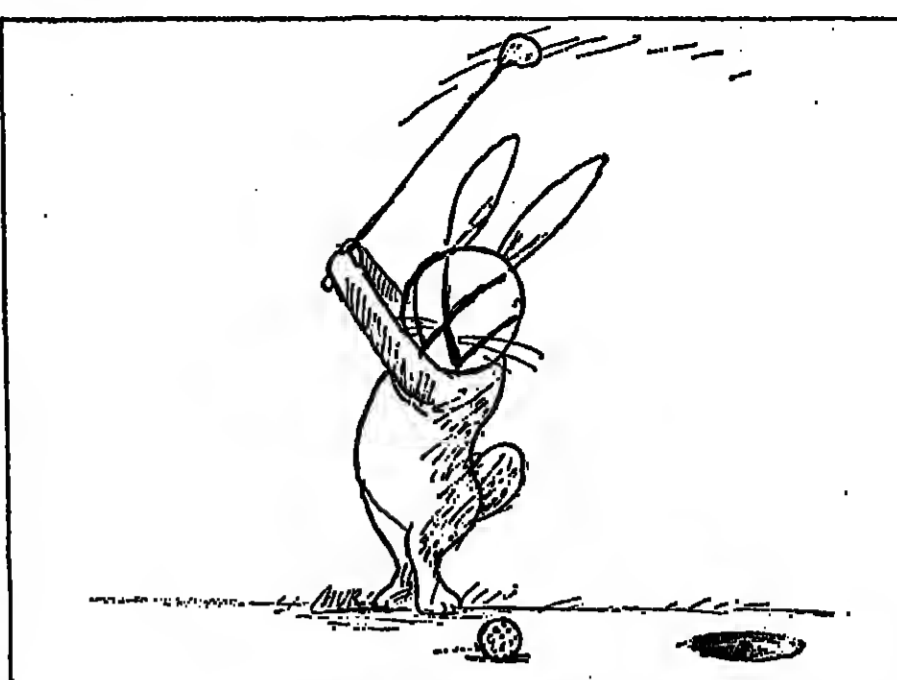
Europe's aviation industry has in the past few years managed to develop internationally marketable products in certain sectors.

The German-American Chamber of Commerce includes among these products the A 300 Airbus, VFW-Fokker's range of aircraft (the F 27, F 28 and VFW 614) and the Tornado MRCA European fighter plane. And, finally, the Anglo-French Concorde is certainly an enormous achievement.

But persistent efforts to gain a foothold in the United States with the A 300 Airbus have so far failed to lead to a sale. At the beginning of the year, Western Airlines seriously considered buying the Airbus, only to settle for an American aircraft in the end.

The VFW 614 German Jet also failed to get a hoped for order from the US Coast Guard.

According to the Chamber, even the



VW Rabbit on the US grass (Cartoon: Luis Munschetz/Süddeutsche Zeitung)

many months before a VW is equipped in exactly the manner customers in New York or Chicago want. This time-lag will be eliminated in future.

It is lamentable that German investments are concentrated on the United States and that developing countries are benefiting little from the flow of capital.

But according to the Confederation of Federal Republic Industry there are good reasons for this state of affairs.

Tax relief and cheap labour in the developing nations lose much of their attraction as a result of inadequate infrastructure and poor productivity of the local labour force. Moreover, many developing nations demand that their nationals hold a controlling interest in the company — a demand which has a deterrent effect, as do difficulties in transferring profits. None of these obstacles hamper investments in the United States.

And as opposed to many developing nations who insist that products be exported in order to improve their balances of payments, America imposes no such restrictions.

Those investing in the United States invest in the world's freest country with a huge market.

Gerhard Meyenburg (Kölnischer Stadt-Anzeiger, 19 March 1977)

America chary of buying European advanced technology

refusal of the New York Port Authority to grant the Concorde landing rights at Kennedy Airport must be viewed as an obstacle to the development of highly sophisticated European technology. Incidentally, the decision about landing rights for the Concorde has been postponed once more and will now probably have to be acted in court.

America's leading role in sophisticated weapons systems is still undisputed, although Europe has some genuine alternatives to offer in certain sectors.

First successes accrued within grasp in connection with the new generation of tanks for Nato. In an agreement between Bonn Defence Minister Georg Leber and the former US Secretary of Defence Donald Rumsfeld dating back to July 1976, the two countries agreed to standardise by America's adopting the gun of Germany's tank Leopard II which in turn would be equipped with the engine of the XM-1 American tank.

Optimists even went so far as to hope that one of the two tanks — be it the

Leopard II or the XM-1 — would emerge victorious following tests.

These tests were carried out in the United States by that country's Armed Forces. According to the Chamber it would "have been a miracle if the Leopard had won the test."

The New York Times writes that US Army experts said that the Leopard was 30 per cent more accurate in target-shooting than the XM-1. Moreover, the still classified report is said to have established that the Leopard had a longer range and a lower fuel consumption as well as being more reliable than its American counterpart. But even so, the "mini agreement" concerning the uniform gun and propulsion is no longer certain. The US Army evidently finds it difficult to replace the planned 105 mm gun by the German 120 mm gun before 1985.

According to the Chamber, this development is incongruous with the statement by the new US Secretary of Defence Brown who announced that his country would embark on a closer cooperation with its European allies.

It would be regrettable, said the Chamber of Commerce, if Mr Brown had been motivated only by the hope that the European allies would adopt the American Airborne Warning and Control System (AWACS).

(Süddeutsche Zeitung, 23 March 1977)

Japan is like

## SHIPPING

### US trust-busters aim at North Atlantic shipping conferences

Trust-busters at the US Justice Department have set their sights on the North Atlantic shipping conferences. "Nothing will come of the move," a spokesman for Hapag-Lloyd, Hamburg composedly comments, while VDR, the Federal Republic Shipowners Association, rates the exercise "an attempt by young college graduates out to make a name for themselves by conducting probes that are poles apart from practical considerations."

The "young college graduates" have indeed fielded heavy artillery. In a report concluded in February they accuse North American and European members of the conferences of "reducing the volume of world trade" by jointly fixing freight rates and distribution.

They also stand accused of delaying the use of cost-cutting innovations in shipping and, by virtue of limiting exporters' access to less expensive routes

### Bonn earmarks an extra DM 50 mill.

Great expectations need not be placed in the supplementary aid programme to boost domestic shipbuilding, according to the Federal Republic Shipowners Association, Hamburg.

The association has called for more effective provisions in respect of subsidies towards newly-commissioned tonnage. More cash must be made available and the terms need improving.

The Federal government has earmarked an additional fifty million deutschmarks in shipbuilding subsidies, increasing percentage aid to owners from twelve and a half to seventeen and a half.

This supplementary measure is not intended to boost the merchant navy, however, the association claims. It represents no more than an increase designed to offset spiralling costs.

A more suitable move, shipowners feel, would be the investment allowance proposed by shipyards towards the cost of building new vessels and refitting existing tonnage. Yards have also called for grants towards reorganisation.

Owners nonetheless view as a step in the right direction the requirement that subsidised tonnage be registered in this country for at least eight years (as against ten).

Government aid to shipbuilding is also possible via development aid allocations, assuming that Third World countries commission ships from yards in this country.

The Bundeswehr has also announced plans to invest 2,300 million deutschmarks in the construction of new frigates. This too should help shipyards to ride out the doldrums.

(Frankfurter Allgemeine Zeitung für Deutschland, 19 March 1977)

of shipping, of behaving in a manner befitting "monopolists out to maximise profits."

These accusations constitute one of the weightiest attacks ever on the shipping conference system, which has been in existence for more than a century.

The anti-trust agency has selected a ten-year period and noted that in this period freight rates have been increased by amounts varying between 34 and 149 per cent.

Exporters who rely on regular shipping services have no option but to knuckle under to price increases. Exporters urgently need more wide-ranging competition, the agency argues, advocating abolition of the US Shipping Act of 1916, which ensures conference shippers immunity from anti-trust legislation.

Tooth-and-nail competition for freight would ensue, which is of course what the US Justice Department envisages, but the Federal Republic Shipowners Association is afraid that owners would go to the wall before long, leaving exporters worse off than previously.

The trust-busters certainly mean business, as they demonstrated last year. In September they embarked on their bid to bust trusts on the high seas by starting proceedings against seven US and European shipping companies, including this country's Hapag-Lloyd.

Hapag-Lloyd were required to submit to Washington documents of all kinds relating to rates, terms and other agreements with shipowners, forwarding agents, exporters and recipients involved on North Atlantic routes.

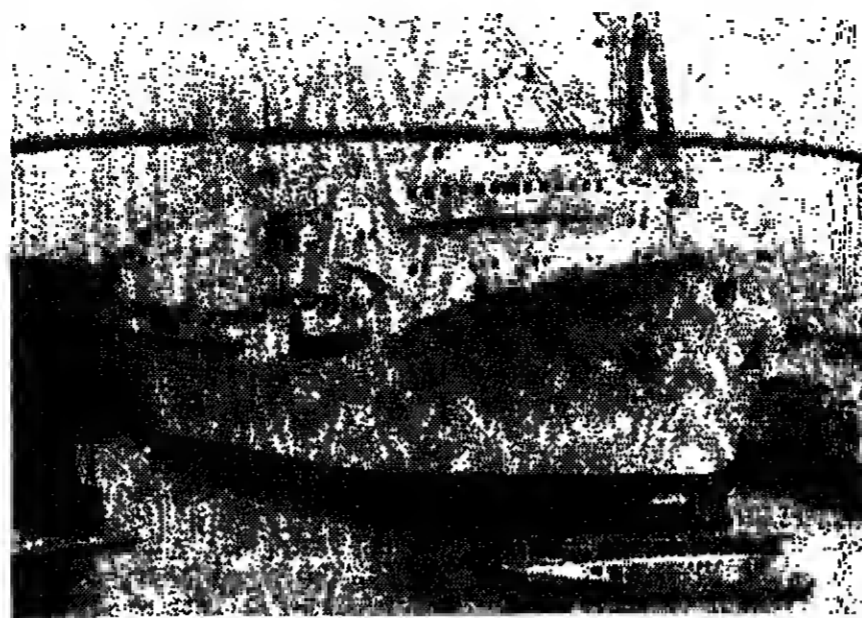
The trust-busters requested not only financial statements but also letters, teleggrams, teleprinter messages, protocols, copies of speeches, photos, maps and charts, tape recordings and even appointment book and diary notes.

### Call for higher shipbuilding subsidies

Government subsidies towards shipbuilding in other European countries are perceptibly higher than in the Federal Republic, Hermann Nö, president of Bremerhaven chamber of commerce and industry, claims.

Herr Nö has compared the support measures undertaken by a number of European countries to aid ailing shipyards. These measures, he notes, are undertaken individually and without regard either for standard procedures within the Common Market or for OECD regulations.

In terms of the number of shipyard workers, Bonn would need to subsidise shipbuilding to the tune of 700 million deutschmarks rather than the current figure of 180 million if this country's aid to shipbuilding were to bear comparison with Holland's.



The nuclear freighter Otto Hahn (Photo: Contif)

This constitutes sufficient paperwork to fill several containers and would take two or three years to sift through.

As yet, however, it looks as though Hapag-Lloyd will emerge unscathed. The Bonn Transport Ministry has hitherto placed an embargo on the provision to foreigners of shipping policy documents and seems likely to refuse permission yet again.

British, French, Swedish, Dutch and Belgian shipowners, who are all similarly indicted, have likewise lodged protests and refused to supply information on the ground that they are legally prevented from so doing.

America's trust-busters are none too popular in their own country, and if they stick to their guns shipowners hope that President Carter will intervene.

Mr Carter is a former naval officer and committed to furthering the interests of US merchant shipping. He is hardly likely to allow the Justice Department to bring not only foreign but also US shipowners to the brink of bankruptcy merely because the trust-busters are committed to the principle of competition at all costs.

Frank Otto

(Die Zeit, 18 March 1977)

### Hapag-Lloyd to sail nuclear freighter

Otto Hahn, the 16,870-GRT nuclear-powered bulk cargo freighter, will fly the Hapag-Lloyd ensign from April. Hapag-Lloyd of Bremen at Hamburg, the country's largest shipping line, are keen to gain experience in handling the nuclear merchantman, a spokesman for the company stated in Hamburg on 15 March.

The Otto Hahn was launched six years ago and although Hapag-Lloyd have no current plans to commission a nuclear freighter of their own they feel that under their management, with the benefit of Hapag-Lloyd's extensive international ties, the freighter will gain access to a larger number of ports.

The previous owners are GKSS, State-run nuclear shipping agency in Geesthacht, near Hamburg. The Otto Hahn is shortly to set sail for the East, having hitherto mainly served West Africa, Western Europe and America.

According to GKSS plans to commission a more powerful nuclear container freighter have reached the stage which construction could begin immediately.

A nuclear container freighter is also run at a profit if only permission to dock at more ports were forthcoming. The Hapag-Lloyd spokesman noted that far the Otto Hahn has berthed at only thirty ports, with permission granted to dock at several others.

Hapag-Lloyd, however, would consider commissioning a nuclear freighter in conjunction with the Federal Research Ministry. The company has been negotiating with GKSS for the past three years or so.

Nuclear freighter Otto Hahn is currently the only vessel of its kind in the world. It is powered by a pressurised water reactor linked to 11,000-hp turbines and reaching speeds of seven knots. By last autumn the freighter had covered 460,000 nautical miles on mere 45kg of uranium fuel.

(Bremer Nachrichten, 17 March 1977)

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MEDICINE

Berlin congress reviews latest developments in neurology

Contrary to the usual practice until only a few years ago, cross-eyed children should not be treated by covering one eye for extended periods.

It has now been established that this therapy could lead to a loss of sight for the covered eye. Research carried out on vertebrate animals in recent years proves that even a relatively short-term covering of one eye can cut off certain nerve connections. As a result, the central nervous system acts as if these connections were unnecessary and permits them to atrophy.

This switching off of nerve communications can only take place at a specific phase of the child's development — a phase which, where human beings are concerned, has not yet been clearly pinpointed.

It lies in the nature of the nervous system that temporarily disused nerve links can subsequently not be reactivated. Since these facts were established by researchers, eyes of cross-eyed children are covered alternately for short periods only. This prevents the central nervous system from switching off prematurely.

It is evidently a basic principle of nature that every organism is initially equipped with more nervous links than necessary. Researchers have established that Man is equipped with between two and eight times as many nerve cells as he retains in the course of his life.

The Ninth Dahlem Medical Conference in West Berlin, which was largely devoted to this issue, established that the genetic code cannot entirely antici-



pate how many nerve links will be needed. Says Professor Wolf Singer of the Max Planck Institute of Psychiatry in Munich: "It is evidently much more economical for nature not to burden the genes with this information but to obtain it from the environment."

Man's organism finds out by trial and error which nerve links belong together and are needed. In the course of this process, the meaningful is consolidated, and useless ballast is jettisoned. This "competition" for the preservation of optimal functions can perhaps best be explained by the fact that the cellular terminals of nerve fibres secrete (still unknown) substances which permit the right nerve fibre to be grafted onto it.

The Ninth Dahlem Conference on the "Function and Structure of Nervous Systems", which was attended by more than 50 scientists from eight countries, established above all the following facts: Our brain research is still in its infancy, and scientists are only just beginning to understand the simple patterns of nervous systems and the manner in which they operate.

Thus for instance Professor G. C. Stent of Berkeley, USA, explained at length how the nervous system of leeches, which consists of about 20 segments with 175 nerve cells each, works.

Professor W.E. Reichardt of Tübingen explained the processes by which the common house fly recognises shapes and movements. The Tübingen researcher has dealt with this problem for more than twenty years without having been able to answer all questions. Professor Reichardt said that he hopes to be able to conclude his work about the fly's ability to recognise shapes in about five years.

Other researchers delved into the nervous systems of worms, snails, frogs, fish, cats and apes.

But the fully developed human brain, weighing about 1.5 kilos and consisting of 10,000 million nerve cells, still mystifies scientists.

Only via the nervous systems of animals can we gain some insight into

the manner in which Man's central nervous system processes information.

But even if we still have a long way to go before fully understanding the human nervous system, the direct and indirect applications of research results in this field are still extremely manifold.

Thus for instance it is hoped that this type of research will provide information on how to restore certain functions of the senses, improve diagnostic methods in neurology as a result of a better understanding of the functions of certain brain centres and give insights into the connection between early childhood experience and the development of specific functions of the nervous system.

Research into the biochemical transmission substances for nerve impulses, which has become particularly topical following the discovery of neuro-transmitters containing morphia, can open up new therapeutic avenues in psychiatry.

Konrad Müller-Christiansen (Hannoversche Allgemeine, 16 March 1977)

Cologne guide to 'Parenthood for Beginners'

Commissioned by the Ministry for Family Affairs, the Health Centre in Cologne has just published a guideline for young parents.

The 60-page brochure, which is entitled "The Baby", has a circulation of one million copies and is available free of charge.

The publication includes such chapters as "What You can do for Your Child During Pregnancy", "Rhesus Factor" and "Can Birth be Facilitated?".

Thirteen pages are devoted to the baby's diet, six to the care of the infant and fifteen to the infant's health. The objective of the publication is to assuage the anxieties of parents.

With regard to some chapters, however, it is justified to ask whether the whole thing warranted an expenditure of 700,000 Deutschmarks of the taxpayer's money... for instance: "The Daily Bath — Fun for the Father" or "Babies Need Sunshine and Air".

More precise and informative, on the other hand, is the appendix with such headings as "Your Good Right", "Protective Legislation for Mothers" and "What to do When a Child of Working Parents Falls Ill".

This country's legislation provides that a parent caring for a child aged up to eight is entitled to "five days' worth of sickness benefits per annum.

(Kölnner Stadt-Anzeiger, 19 March 1977)

Lung specialist lambasts cigarette smoking again

Every smoked cigarette hastens death by 15 minutes. This is the conclusion arrived at by Professor Trendelenburg of the Homburg University Clinic.

In an article published in *Mittelrheinische Medizinische Wochenschrift* (Münch Medical Weekly) Professor Trendelenburg, a lung specialist, stressed that 600 harmful substances have been found in tobacco smoke so far. The inhaling of 20 cigarettes a day over a period of 20 years deposits six kilos of dust in the respiratory system.

Aware of these facts, the tobacco industry has been making an all-out effort to develop "defused" tobaccos, including the nicotine-free cigarette. Filters, too,

have been made more effective. But even so, says Professor Trendelenburg, "smoke is smoke".

Ideally, cigarettes should be free not only of nicotine but also of tar. And even then, short of forgoing the combustion process altogether, the only solution would be a filter that blocks out smoke entirely.

Following extensive polls involving patients with chronic bronchitis, Professor Trendelenburg arrived at the conclusion that only about 15 per cent of smokers are able to give up the habit without systematic help.

(Welt am Sonntag, 20 March 1977)

Munich anaesthetists claim acupuncture successes

Confronted with the challenge of China's age-old empirical acupuncture method, modern anaesthesiology has been prompted to rethink.

The Federal Republic's Heart Centre reported 800 successful cases of acupuncture anaesthesia, and Munich University's Urology Clinic has administered 700 such anaesthetics so far.

Professor A. Doenicke of the Surgical Polyclinic in Munich reported on the results achieved by this method. His clinic has been using electro-stimulation anaesthesia in surgery for about ten years.

This process involves putting 18 needles into various parts of the human body and imparting to these needles an electric current of no more than 20 milli-amperes. It must however be pointed out that the classical acupuncture points are inapplicable in this type of anaesthesia. The project group at the Surgical Polyclinic is equipped with apparatus enabling it to vary the electric current, thus providing the necessary dosage for electro-stimulation anaesthesia in accordance with case to case requirements. This is necessary because the electrical resistance of the skin and the tissues varies not only from person to person but also undergoes changes in the course of an operation.

As a result of such individual adjustments, even patients who suffer from circulation disorders or heart rhythm disturbances can safely be anaesthetised by this method. Moreover, this delicate control prevents burns which could otherwise occur at the points where the acupuncture needles have been inserted. Electro-stimulation increases the pain threshold by at least thirty per cent. As a result, the dosage of painkillers to be administered can be reduced.

In cases of complicated abdominal operations, frequently lasting for ten hours, the patient receives roughly the same amount of drugs as is normally used in outpatient treatment prior to administering anaesthesia.

This method does away entirely with the need for the very expensive and harmful (particularly for the liver) inhalation, anaesthetic halothane. Apart from electro-stimulation via the needles, the patient is administered only laughing gas. Due to the sparing use of pharmaceuticals, the patient feels considerably better following such an operation than he would after traditional surgery. He comes out of anaesthesia earlier, can breathe properly instantly and suffers less from side-effects.

According to Professor J. Kugler of the Neurological Polyclinic in Munich, acupuncture also has its place in treating pain. The insertion and twisting of the needles, slight warming up and electro-stimulation have the effect of changing the processing of bodily sensations.

has been borne out by encephalography — thus reducing the ability to register pain.

The role played by suggestion in acupuncture treatment is still unclear. The same applies with regard to physiological reactions and the so-called endorphines (morphine-like substances released by the brain).

A. Fauth (Frankfurter Allgemeine Zeitung, 16 March 1977)

NATURE NOTEBOOK

Pollution decimates bird life, ornithologist warns

A study carried out by the zoologist Bernd Conrad of the Zoological Institute of Freiburg University, in the course of which 457 eggs of native birds were examined, showed that none were free of pesticide and PCB deposits.

Had these eggs been intended for human consumption, they would have had to be destroyed.

The results of the study, which was carried out in 1974/75 in conjunction with the German Research Association and the Max Planck Society, have now been made public.

Bernd Conrad summed up his findings in a brochure entitled *Die Giftbelastung der Vogelnest Deutschlands* (Poisons Inflicted on Germany's Birdlife), published by Kilda-Verlag, Greven.

Herr Conrad's analysis of 19 local bird species was prompted by the alarming reduction in the number of birds since the mid-fifties.

Initially, these losses affected primarily predatory birds, subsequently spreading to storks and scalds, and as of late there is a growing number of songbirds affected.

Reports from virtually all parts of the world indicate that the causes of the diminishing bird population are the same everywhere. Man is the culprit number one in all instances.

West and South European countries lament the killing of songbirds by the thousands. Recreation activities interfere with hatching, birds' nests are robbed of their eggs and the natural habitat of the birds is interfered with by the destruction of hedges and unbridled construction activity.

On Lake Constance, the infamous mass slaughter of waterbirds during this year's open season by hunters from West Germany, Austria and Switzerland has just come to an end.

Many species of birds suffer from the fact that their food is contaminated by pesticides, harmful metals and PCB. Among the pesticides, the main culprits are Hexa (HCB), Lindan, Aldrin, Heptachlor and Dieldrin. Other noxious substances are softeners for paint and PCB (used in the plastics industry).

These harmful substances find their way into the birds' environment through the sewerage and garbage disposal systems. Like pesticides, they are absorbed by the birds in numerous ways. Moreover, the natural habitat of the birds is shrinking, eggshells have become thinner and frequently break under the weight of the brooding hen, and fledglings die prematurely.

All these facts have been established by British, Dutch, American and Swedish ornithologists. But Bernd Conrad is the first to have drawn attention to this situation in the Federal Republic of Germany. His study demonstrates that the warnings issued by ornithologists were only too justified.

Twelve predatory bird species have dwindled to such an extent that they are threatened with extinction. This was established two years ago by the ornithologist Dr Gerhard Thielecke of the Radolfzell bird-watching station.

They include the moor buzzard or marsh harrier, the peregrine falcon, the goshawk, the sparrowhawk, the sea eagle and the eagle owl. Other species facing extinction are the kite, the tree falcon and the honey buzzard.

Bernd Conrad established that this country's birdlife is particularly threatened in industrialised areas. But intensive agriculture also places birdlife in jeopardy.

His egg analysis showed that 97 per cent of the examined eggs contained two, 58 per cent three, 22 per cent four and 8 per cent five different pesticides in large quantities.

It has been established that the diminishing thickness of the eggshells is directly attributable to pesticides in the birds' bodies in five different species. It seems evident that some of these pesticides have an adverse effect on the calcium metabolism of the birds inasmuch as they affect the glands and thus the enzyme production.

Curiously enough, noxious substances

in the environment do not lead to thinner eggshells with all species. Bernd Conrad feels that this might be due to differing metabolism mechanisms or to differing food chains for the various species.

Most animals serve as food for other animals. There are clearly discernible food chains. Certain small animals are eaten by larger ones, and these in turn serve as food for still larger beasts.

If pesticides are washed into bodies of water, they are soon absorbed by unicellular creatures, and these are eaten by fish who, in turn, are eaten by birds. Thus the poison becomes cumulative within the various links of the food chain. The data made public by Bernd Conrad concerning dying birdlife in the Federal Republic must be viewed in conjunction with the general threat to animal life and the progressive extermination of more and more species.

Since every animal fulfils a specific function in nature, continuous decimation must affect the ecological balance.

Many songbirds, for instance, serve a useful function by eating insects. But it is quite conceivable that a point of no return could be reached and that a vicious circle could be set in train. Pests could multiply out of control for lack of natural enemies. This in turn would require the increasingly massive use of chemical pesticides which would accelerate the decimation of larger species with a longer life-span still further.

The dramatically increased number of gnats and mosquitoes in many parts of Europe is an indication that this development has already set in.

The cutting down of the forests in the southern regions of Europe, which turned them into barren wastes, has its parallel in today's world. In order to maintain our level of consumption and economic growth we are placing the ecology on earth in jeopardy. And the consequences of such an attitude must lead to disaster in the long run.

Theo Löbsack (Kölnner Stadt-Anzeiger, 19 March 1977)



Sea eagle



Moor buzzard



Eagle owl

(Photos: Coni-Press, Archiv)

Hamburg scientists recommend painless death for lobsters

The Federal Research Institute for Fisheries in Hamburg has declared war on those gourmets who maintain that a lobster is only good if boiled alive.

Experts term the traditional method of preparing a lobster barbaric, saying that "the death throes of the animals endured over a long period, primarily due to the heavy compack which prevents swift heat penetration." Experiments have established that a swift and painless killing of the lobster by electrocution does not affect its food quality.

The experiments, in which three American and three European lobsters were used, were based on the animal protection legislation in this country, according to which the laws stipulating painless killing apply to marine animals as well.

The Hamburg researchers used an implement customary in the fishing industry, whereby a tank of water with

marine animals is exposed to electric shock for a duration of 30 seconds.

The contention put forward by chefs throughout the world that only the age-old method of plunging the live lobster into boiling water preserves the fine aroma of these crustaceans has been refuted by the Hamburg experiments. It has been established that, like in boiling, the lobster's tail curls under an electric shock. Connoisseurs have always considered the curled tail a sign of freshness and quality.

Moreover, none of the six experimental lobsters shed their extremities in the death throes resulting from electrocution as gourmets and opponents of a quick death claimed they would do.

The researchers pointed out that, when cooking lobsters that were put to death electrically, no sign of movement could be discerned, and it was clear that the lobsters died within a fraction of a second.

(Der Tagespiegel, 20 March 1977)

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Advertisement for Wilofa-Diamant needles, featuring images of needles and contact information for Willi Lohmann.